

A REVIEW OF THE GENUS *EPHEBUS*
(COLEOPTERA: ENDOMYCHIDAE)

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ABSTRACT

A synopsis of *Ephebus*, based on study of type specimens, is given. Three new species are described, while *E. chontalesianus* Gorham is synonymized with *E. piceus* Gor., and *E. depressus* and *E. ignobilis* Gor. are transferred to *Anidrytus*. The 3 new species are: *E. sulcatus* (Mexico and northern South America), *E. longulus* (northern Brazil), *E. exclusus* (Guatemala).

Genus *Ephebus* Gerstaecker

Ephebus Gerstaecker 1858:293; Gorham 1889:131; Strohecker 1953:61.

Type-species: *Ephebus cardinalis* Gerstaecker (by Strohecker 1953).

Although this generic name was listed by Dejean, it was first validated by Gerstaecker, who used it in combination with 5 specific names. Gorham added 4 specific names, but of these 1 must be synonymized and 2 transferred. The genus comprises 9 species of small (3-6 mm.) endomychids of similar appearance. All are rust-red with long and semi-erect coppery pubescence, antenna mostly black. The genus may be easily differentiated from *Stenotarsus* in having sides of pronotum but narrowly margined, and from *Epipocus*, *Anidrytus*, and *Epopterus* in the symmetrically widened antennal club, rather than having articles 9-10 transversely triangular.

The rather sparse material of this study is in the Academy of Natural Sciences, Philadelphia (ANSP), British Museum of Natural History (BM), Bayerische Staatssammlung (BS), California Academy of Sciences (CAS), Florida State Collection of Arthropods (FSCA), Muséum d'Histoire Naturelle (PM), Zoological Museum of Humboldt-Universität (ZMB), Instituto de Zoologia Agricola at Maracay (VIZ).

With the small amount of material and great external similarity among the species, I have not felt able to make a worthwhile key. Determinations must, for the present, be based on male specimens, and the figures will be more helpful than a key.

Partial Key to Species of *Ephebus*

- | | | |
|--------|--|---------------------------|
| 1. | Larger (5 mm.); 11th antennal segment as long as 9 and 10 combined..... | <i>cardinalis</i> |
| 1'. | Less than 5 mm.; 11th antennal segment shorter than 9 and 10 combined..... | 2 |
| 2(1). | Base of pronotum with transverse impression..... | 3 |
| 2'. | Base of pronotum without such impressed line..... | 4 |
| 3(2). | Transverse impression of pronotum narrow..... | <i>longulus</i> |
| 3'. | Transverse impression wide..... | <i>sulcatus; hirtulus</i> |
| 4(2'). | Antennal segment 11 wholly pale..... | <i>terminatus</i> |
| 4'. | Antennal segment 11 black, tip may be paler..... | 5 |

- 5(4'). Antennal segments 1-2 red.....*pumilus*
 Antennal segments 1-3 or 4 red.....*convexiusculus*; *piceus*; *exclusus*

Ephebus cardinalis Gerstaecker

(Fig. 4, 11)

Ephebus cardinalis Gerstaecker 1858:294.

Antennal articles 1-2 red, 3 and 4 much longer than wide, 11 almost rectangular, about as long as 9-10 combined. Pronotum slightly more than 2X as wide (base) as long (mid-line), finely densely punctate. Elytra with distinct shoulders, nearly 3.5X as long as pronotum, regularly oval in outline, finely and very densely punctate. Length 4.5-6mm.

Monotype male from Colombia in Thomson coll. (PM). A large and abraded female from Colombia (BM) has been determined by Gorham as

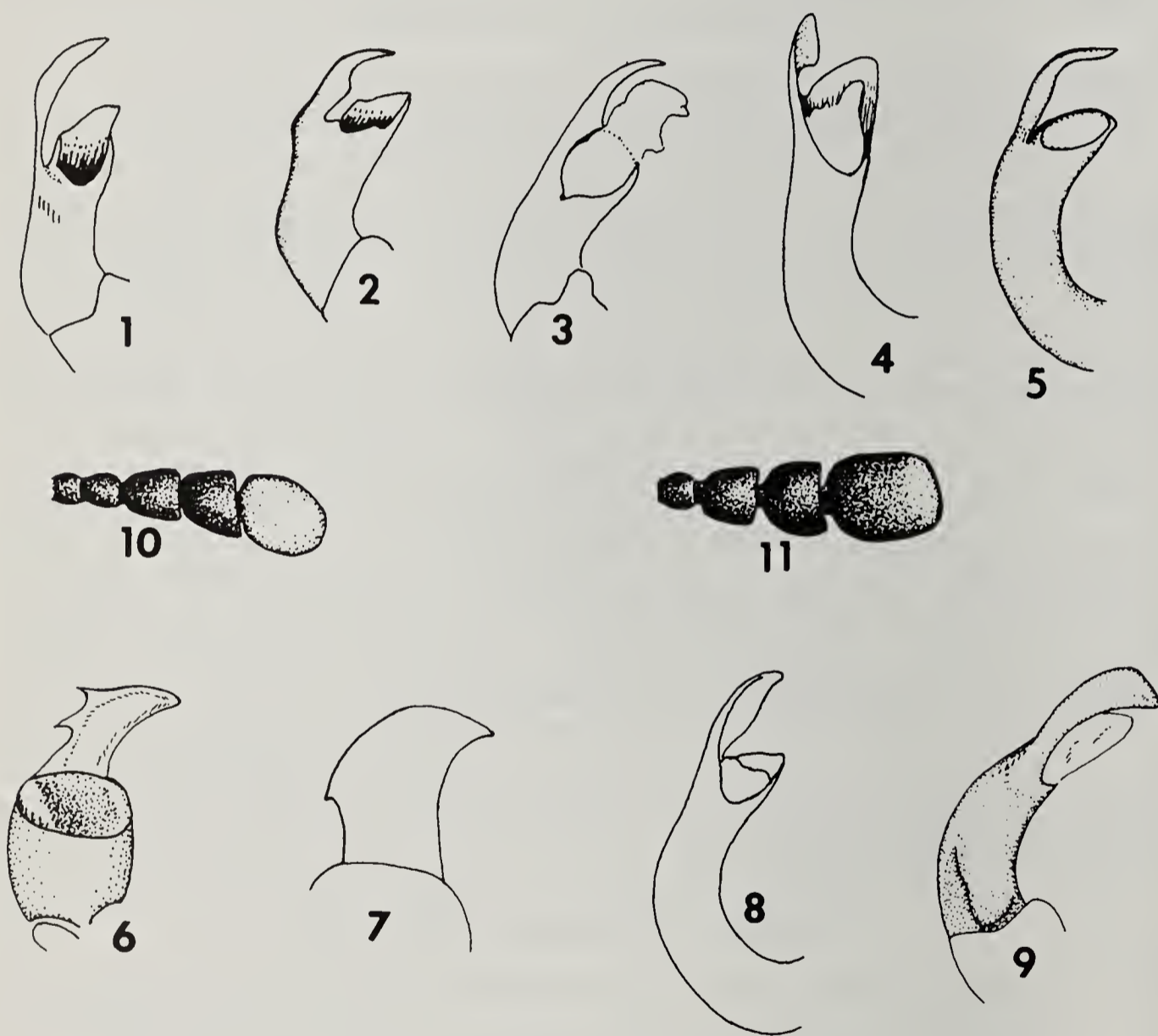


Fig. 1-11. 1) *Ephebus terminatus*, aedeagus, Caracas; 2) *E. pumilus*, aedeagus, lectotype; 3) *E. convexiusculus*, aedeagus, holotype; 4) *E. cardinalis*, aedeagus, holotype; 5) *E. piceus*, aedeagus, Sta. Marta Mts.; 6) *E. hirtulus*, aedeagus, Para; 7) *E. sulcatus*, aedeagus, holotype; *8) *E. exclusus*, aedeagus, holotype; 9) *E. longulus*, aedeagus, holotype; 10) *E. terminatus*, antennal club, holotype; 11) *E. cardinalis*, antennal club, holotype.

*The fine truncation of tip may be due to breakage.

cardinalis and carries another label "*Ephebus auropilosus* Reiche", an unestablished name.

Ephebus convexiusculus Gerstaecker

Fig. 3

Ephebus convexiusculus Gerstaecker 1858:296

Antenna black, articles 1-3 and tip of 11 rust-red; articles 4 and 5 each longer than 3, 11 short, oval, about 1.5X as long as 10. Pronotum 2.5X as wide as long, sides parallel in basal half, rounded in front to half basal width, disc finely and densely punctate. Elytra as wide at base as pronotum, short, oval, finely and densely punctate. Length 4mm. The unique type is a male, not female as cited by Gerstaecker. It is the only specimen I have seen.

Monotype male from Brazil, Sello (ZMB no. 21838).

Ephebus terminatus Gerstaecker

Fig. 1, 10

Ephebus terminatus Gerstaecker 1858:295.

Antenna black, articles 1-3 rust-red, 11 pale yellow; articles 3 and 4 of equal length, those following progressively shorter, 8 quadrate. Pronotal disc finely and rather sparsely, lateral areas rugosely punctate. Elytra subequal in basal width to pronotum, 3.5X as long as pronotum, finely and densely punctate. Length 4.5mm.

Monotype female from Colombia (ZMB no. 21837). This museum has also 2 males, 1 female from Carácas (O. Thieme) and 2 females from Venezuela are in BM.

Ephebus pumilus Gerstaecker

Fig. 2

Ephebus pumilus Gerstaecker 1858:297.

Antenna less than half body length, very stout, each of articles 3-7 little longer than wide, 8 quadrate, wider than 7, club almost as long as 3-8 combined, its articles subequal in length; articles 1-2 red, the others black. Pronotum with sides gradually convergent from base forward, little rounded to front angles, hind angles acute. Elytra 3.3X as long as pronotum and as wide at base, widened in anterior third thence gradually narrowed to rounded apex. Length 3-4mm. Although Gerstaecker cited only the female and the specimen with his label is female, registration numbers indicate that he had a series of 6 specimens, at least 1 of which is male.

Lectotype male from Colombia, Moritz (ZMB no. 21839). There are 5 paralectotypes with the same number.

Ephebus exclusus Strohecker, **new species**

Fig. 8

Ephebus piceus Gorham 1889:131 (in part).

Form short, oval, roundly convex, rust-red with coppery pubescence. Length 3.5mm, max. width 2.3mm. Antenna about half as long as body, articles 3-6 subequal, each 1.5X as long as wide, 7-8 somewhat shorter and wider than 6, 11 hardly longer than 10, its apex rounded; first 4 articles red

(probably immature), others black. Pronotum with sides feebly convergent from base, moderately rounded to front angles, disc evenly convex, rather coarsely and densely punctate, lateral sulci deep. Elytra widest in front half, densely punctate, pubescence long and semi-erect (but much abraded).

Holotype: male from Guatemala: Vera Paz, Telemán, Champion (BM).

Ephebus piceus Gorham

Fig. 5

Ephebus piceus Gorham 1889:131, Pl. 7, Fig. 1-2. Holotype (by original designation): male from Guatemala: Zapote, Champion (BM).

Ephebus chontalesianus Gorham 1889:132, Pl. 7, Fig. 2. Holotype: male from Nicaragua: Chontales, Janson (BM).

Closely similar in appearance to *E. exclusus*. Gorham described the antenna as having 4 basal articles red but apparently in mature coloration only the first 2 are red.

Colombia: Cundinamarca, Finca Bella Vista nr. Sasaima, 7-IV-1965, P. R. Craig (CAS; FSCA).

Ephebus longulus Strohecker, **new species**

Fig. 9

Form long, oval. Color rust-red with coppery pubescence, last 6 antennal articles black. Length 2.9mm. Antenna 1.3mm long, articles 2-5 subequal, 6 a little longer than 5, 7, and 8 each about as long as 6 but sequentially wider; with 8 the broad, compact club appears 4-jointed; article 11 somewhat rectangular, about as long as 9-10 combined. Pronotum with basal width 2.2X median length, disc finely sparsely punctate, lateral sulci deep, long-triangular, base with marginal impressed line. Elytra almost 3.5X as long as pronotum, widest in anterior third, sides continuously but weakly curved.

Holotype male from Brazil: Amazonas, Miss. Cauaburi am Canal Maturaca (70 m.), 16-I-1963, C. Lindemann (BS).

Ephebus sulcatus Strohecker, **new species**

Fig. 7

Short, oval, moderately convex, rust-red with brassy or coppery pubescence, last 7 antennal articles black. Length 3.3-3.5mm. Antenna 1.8mm long, article 2 quadrate, 3 about 2X as long as wide, 4-6 shorter than 3 but each longer than wide, 7 ovoid, 8 globose; club abruptly formed, articles 9 and 10 slightly transverse, 11 ovoid-truncate, 1.5X as long as 10. Pronotum with basal width 2X median length, sides finely crenulate, parallel behind, rounded to front angles; lateral sulci deep and long-triangular, base with deep transverse sulcus, disc finely, sparsely punctate. Scutellum very large, triangular. Elytra but little longer than their combined width, sides continuously rounded from base to apex.

Holotype male from Mexico: Vera Cruz, Coyame, Lake Catemaco, under bark, 1-15-VII-63, D. R. Whitehead (FSCA).

Allotype female with same data as male (FSCA).

Paratypes: female with same data as holotype (FSCA). Colombia: Magdalena, Sierra de San Lorenzo, Cincinnati Trail, 4-6000', 20-VII-20,

F. R. Mason, 2 males, 2 females (BM), 6 males, 10 females (ANSP; FSCA). El Salvador: Quezaltepeque, 500 m., July, Cavagnaro and Irwin, 2 females (CAS).

Ephebus hirtulus Gerstaecker

Fig. 6

Ephebus hirtulus Gerstaecker 1858:297.

Among external features only the coarser puncturing of pronotum appears to differentiate this species from *sulcatus*. Until topotype males are available for study some question as to identity of *hirtulus* must remain, but the male specimens noted here agree well with the type female. To avoid possible future problems I shall not name a plesioallotype.

Monotype female from Brazil: Bahia (ZMB no. 21840). Other specimens examined are: Brazil: Santarem, female; Para, male, female (BM); Amazonas, Tucano, series, J. & B. Bechyné (VIZ; author).

Two specific names must be transferred from *Ephebus* to *Anidrytus*.

Anidrytus depressus (Gorham)

Ephebus depressus Gorham 1875:17.

Anidrytus depressus, Arrow 1920:46.

Holotype female from Brazil: Rio de Janeiro (BM).

Anidrytus ignobilis (Gorham), **new combination**

Ephebus ignobilis Gorham 1875:17.

Holotype female from French Guiana: Cayenne (BM).

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